

IN THE CLAIMS

Please amend the claims as follows:

1. A device comprising at least a first module and a second module, said first module ~~{M1}~~ being intended to supply instructions ~~{I}~~ to said second module ~~{M2}~~, and said second module being intended to receive data ~~{D-IN}~~ and to perform at least one function ~~{F1}~~ that necessitates the execution of a succession of operations ~~{O1,j}~~ so as to produce a result ~~{Ra}~~ based on a plurality of received data, characterized in that:
  - said first module is arranged for supplying said instructions to the second module in predefined time windows ~~{t6n, t6n+1, t6n+2 and t6n+5}~~, said instructions containing at least one operation indication ~~{j}~~,
  - said second module comprises an operation counter ~~{COi}~~ intended to indicate the next operation to be executed, and a data counter ~~{CDi}~~ intended to count the received ~~unused~~ data,
  - and said second module is arranged for executing a received instruction only if the operation indication contained in the received instruction coincides with the next operation to be executed such as indicated by its operation counter, and if its data counter indicates that the data necessary for the execution of this operation are available.
2. A device as claimed in claim 1, characterized in that the second module is intended to receive data in predefined time windows ~~{t3n+2}~~, said data ~~{Dq}~~ being associated to an indicator of data validity ~~{Vq}~~ which is in a ~~<<valid>>~~ valid state when

the data can be used by the second module, and in an ~~invalid~~ invalid state when the data cannot be used by the second module.

3. A device as claimed in claim 1, characterized in that said second module is arranged for producing, in predefined time windows ~~(t<sub>6n+5</sub>)~~, results ~~(R<sub>n</sub>)~~ associated to a result validity indicator ~~(V<sub>n</sub>)~~, the result validity indicator being in an ~~invalid~~ invalid state when no result at all is available.

4. A device as claimed in claim 1, characterized in that said second module, which is intended to perform a plurality of additional functions ~~(F<sub>i</sub>)~~, comprises an additional data counter ~~(CD<sub>i</sub>)~~ and an additional operation counter ~~(CO<sub>i</sub>)~~ for each of said additional functions, and in that the instructions ~~(I)~~ produced by said first module contain a function indicator ~~(i)~~ which permits the second module to determine the data counter and the operation counter to be used for deciding the execution or not of an instruction.

5. A device as claimed in claim 1, characterized in that it comprises a plurality of second modules ~~(CCP0, CCP1, CCP2, CCP3)~~ connected so that results produced by at least one second module form the data received by another second module.

6. A programmable demodulator comprising a device as claimed in claim 1.

7. A receiver comprising a programmable demodulator as claimed in claim 6.

8. A transmission system comprising at least a transmitter and a receiver as claimed in claim 7.